

REMARKS

Claims 1-2 and 4-9 are pending in this application. Claim 1 is amended by this Preliminary Amendment. Support for this amendment is found *inter alia* on page 18, line 18 – page 19, line 17 of the Specification. No new matter is added. Entry of the amendment is respectfully requested.

Reconsideration of the application is respectfully requested in view of the above amendments to the claims and the following remarks. For the Examiner's convenience and reference, Applicants' remarks are presented in the order in which the corresponding issues were raised in the Office Action.

Objection to the Drawings

Applicants note that formal corrected drawings, responsive to the Office Action of April 23, 2002, were submitted with the Amendment and Response filed on October 23, 2002. A copy of the Submission of Formal Drawings is enclosed herewith for the Examiner's convenience.

Rejection Under 35 U.S.C. § 102(b)

Claims 1-2 remain rejected and claims 4-9 are rejected under 35 U.S.C. § 102(b) as being anticipated by Hu *et al.* (J. Clin. Investigation 93:1820-1827 (April 1994)).

The Examiner cites Hu *et al.* for teaching "a method for screening the ability of a putative compound to inhibit the induction of Egr-1." (Final Office Action, page 3, line 13; emphasis original). The Examiner further notes that the previously pending claim 1-2 "recite a method for screening compounds" and do not require that the putative inhibitor "actually functions as an inhibitor." (Final Office Action, page 3, lines 17-19).

In response, Applicants amend independent claim 1 to specify that the claimed method involves a first step (a) of "selecting a putative compound which is found to inhibit induction of Egr-1, decrease expression of Egr-1 or decrease the nuclear accumulation or activity of the Egr-1 gene product" and a second step (b) of "assessing the ability of the putative compound to inhibit proliferation of cells selected from the group consisting of vascular cells and neoplasia cells."

Applicants submit that while Hu *et al.* may disclose a screen for determining the ability of a compound to inhibit Egr-1 expression, it does not teach or suggest the claimed steps of "selecting" those putative compounds that actually inhibit Egr-1 and, in a second step, screen for their ability to also inhibit the "proliferation of cells selected from the group consisting of vascular cells and neoplasia cells" as specified in independent claim 1, as amended. Claims 2 and 4-9 depend from claim 1 and include the same limitations.

Therefore, Applicants respectfully request that the rejection over Hu *et al.* under 35 USC §102(b) be withdrawn.

Rejections Under 35 U.S.C. § 103(a)

Claims 1-2 remain rejected and claims 4-9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Mendelsohn *et al.* (U.S. Pat. No. 5,728,534; "Mendelsohn").

Mendelsohn is cited for disclosing egr-1 reporter constructs and methods of screening for vasoprotective agents that influence expression of egr-1 in vascular cells. The Examiner notes that the prior version of pending claim 1 did not specifically recite a method for screening for compounds that inhibit proliferation of cells. (Final Office Action, page 4).

Applicants amend independent claim 1 to specify that the claimed method comprises: "(a) *selecting a putative compound which is found to inhibit induction of Egr-1*, decrease expression of Egr-1 or decrease the nuclear accumulation or activity of the Egr-1 gene product; and (b) *assessing the ability of the putative compound to inhibit proliferation of cells* selected from the group consisting of vascular cells and neoplasia cells." (emphasis added).

The Examiner acknowledges that Mendelsohn "does not explicitly describe a method of screening for compounds that inhibit proliferation of cells selected from vascular smooth cells or endothelial cells" based on their ability to inhibit Egr-1. (Final Office Action, page 5, lines 1-5). Mendelsohn relates to vasoprotective agents which "activate estrogen responsive genes in vascular cells." Mendelsohn states that "[a]gents which **activate** expression of estrogen responsive genes in vascular cells . . . are candidate vasoprotective agents." (emphasis added; '534 patent, col. 12, lines 24-27). Mendelsohn does not teach or suggest "selecting" **inhibitors** of

egr-1 and screening the selected egr-1 inhibitors for the ability to "inhibit proliferation of cells selected from the group consisting of vascular cells and neoplasia cells" as specified in amended claim 1. In fact, Mendelsohn teaches away from the invention specified in amended claim 1 as there is no motivation to select compounds that *inhibit* Egr-1 and screen them for the ability to inhibit vascular cells as such agents are **not** candidate vasoprotective agents according to Mendelsohn.

Applicants draw the attention of the Examiner to paragraphs 8-13 of Dr. Khachigian's declaration submitted with the Amendment filed October 23, 2002, where Dr. Khachigian noted that Mendelsohn does not provide a rational basis to conclude that an inhibitor of Egr-1 expression would also "inhibit proliferation of cells selected from the group consisting of vascular cells and neoplasia cells" as specified in amended claim 1. Instead, Mendelsohn generally teaches away from this by emphasizing the desirability of activating estrogen responsive genes in vascular cells. (Decl. of Dr. Khachigian, ¶ 8; Mendelsohn, column 1, lines 43 to 49; column 1, line 64 to column 2, line 7; column 12, lines 25-27). As further noted in Dr. Khachigian's declaration, one of ordinary skill in the art would not have learned from the cited documents of Hu *et al.* and Mendelsohn about screening for agents that inhibit vascular and neoplasia cell proliferation based on the selection of agents that also inhibit Egr-1, as specified in claim 1, as amended. (Decl. of Dr. Khachigian, ¶ 8)

Applicants submit that Mendelsohn does not teach or suggest the claimed steps of selecting those putative compounds that actually inhibit Egr-1 and screening for their ability to also inhibit the "proliferation of cells selected from the group consisting of vascular cells and neoplasia cells" as specified in independent claim 1, as amended. Claims 2 and 4-9 depend from claim 1 and include the same limitations. Therefore, Applicants respectfully request that the rejection of claims 1, 2 and 4-9 over Mendelsohn under 35 USC §103(a) be withdrawn.

CONCLUSION

In light of the Amendments and the arguments set forth above, Applicants earnestly believe that they are entitled to a letters patent, and respectfully solicit the Examiner to expedite prosecution of this patent application to issuance. Should the Examiner have any questions, the Examiner is encouraged to telephone the undersigned.

With respect to all amendments and cancelled claims, Applicants have not dedicated or abandoned any unclaimed subject matter and moreover have not acquiesced to any rejections and/or objections made by the Patent Office. Applicants reserve the right to pursue prosecution of any presently excluded claim embodiments in future continuation and/or divisional application.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. 529282000220.

Respectfully submitted,

Dated: April 8, 2003

By: 

Shantanu Basu
Registration No. 43,318

Morrison & Foerster LLP
755 Page Mill Road
Palo Alto, California 94304-1018
Telephone: (650) 813-5995
Facsimile: (650) 494-0792